

Stock.

Work Order ID 140879

140879

Page 1

January 21, 2016 1:43:33 PM

Item ID: D4436-041 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Aft Bracket Assembly
 Start Date: 1/21/2016 Start Qty: 4.00 *4* Cust Item ID:
 Required Date: 2/5/2016 Req'd Qty: 4.00 *4* Customer:
 Reference:

Approvals: Process Plan: SH Date: 20160121 Tooling: _____ Date: _____
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____
 Run Start *NR1*
 Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp: Staff
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D4436	A

100		0.00							
100									
Small Fab	Memo	0.02							
Small Fab	Assemble as per dwg and intall grommet								

4 FF JAN 27 2016

110	QC5- Inspect part completeness to step on W/O	0.00							
110									
QC	Memo	0.00							
Quality Control									

(4) DAS 38 9-89 JAN 27 2016

160	Identify as per dwg & Stock Location: <u>SH618</u>	0.00							
160									
Packaging	Memo	0.00							
Packaging									

4 DAS 6 9-89 JAN 29 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐			FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐					
			OTHER : ☐					

Work Order ID 140879***140879***

Page 2

January 21, 2016 1:43:33 PM

Item ID: D4436-041

Accept

N900040100Setup Start ***NS1***

Revision ID:

Item Name: Aft Bracket Assembly

Stop ***NS2***

Start Date: 1/21/2016 Start Qty: 4.00

4

Cust Item ID:

Required Date: 2/5/2016 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

170

QC21- Final Inspection - Work Order Release

0.00

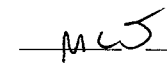
170

QC

Memo

0.01

Quality Control

 **JAN 29 2016** **JAN 29 2016**

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER : _____							
Misidentified	☐	Past Due	☐								

Picklist Print

January 21, 2016 1:43:37 PM

Page 1

Work Order ID: 140879

140879

Parent Item: D4436-041

D4436-041

Parent Item Name: Aft Bracket Assembly

Start Date: 1/21/2016

Required Date: 2/5/2016

Start Qty: 4.00

Required Qty: 4.00

Comments:

IPP REV:A 11.10.05 NEW ISSUE DD VERF:EC
RevB 11.12.22 per PA2 EC verified by:JLM
12.01.24 PER DWG REV.A DD VERF:EC

IPP
IPP REV:C

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D4440-1

Manufactured

No

100

Each

34.0000

1

4

D4440-1

Grommet

DAS
26
9-89

Location

Loc Qty

Loc Code

GA

14

134762

14

ST098

20

140598

20

D4435-043

Manufactured

No

100

Each

6.0000

1

4

D4435-043

Mount Bracket Assembly

DAS
26
9-89

Location

Loc Qty

Loc Code

ST098

6

139439

6

D4436-043

Manufactured

No

100

Each

7.0000

1

4

D4436-043

Aft Outboard Bracket Assembly

JAN 26 2016

Location

Loc Qty

Loc Code

ST61621

1

134293

1

ST621

6

139460

6

DAS
26
9-89

Picklist Print

January 21, 2016 1:43:37 PM

Page 2

Work Order ID: 140879

Parent Item: D4436-041

Parent Item Name: Aft Bracket Assembly

140879

D4436-041

Start Date: 1/21/2016

Required Date: 2/5/2016

Start Qty: 4.00

Required Qty: 4.00

D4436-045

Manufactured

No

100

Each

5.0000

1

4

DAS

26

9-89

D4436-045

Aft Inboard Bracket Assembly

Location

Loc Qty

Loc Code

ST620

5

136598

1

139590

4

AN525-832R6

Purchased

No

100

Each

62.0000

4

16

JAN 26 2016

AN525-832R6

Screw

FF

JAN 26 2016

Location

Loc Qty

Loc Code

CA

14

m129682

14

GA

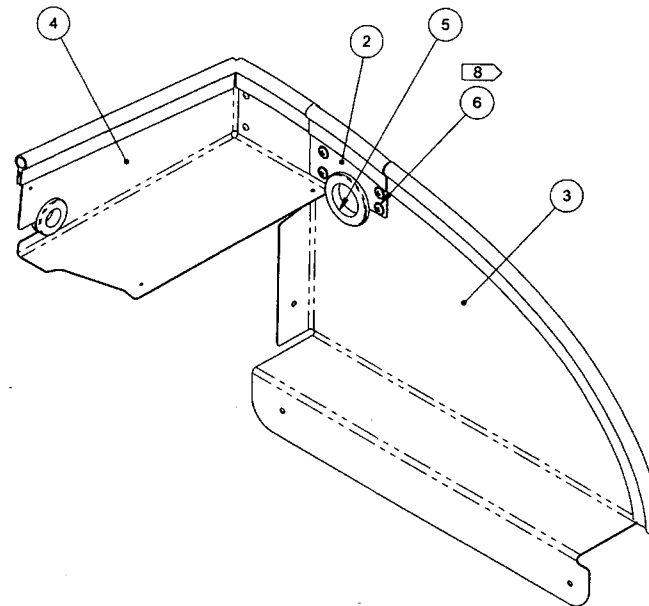
48

m131957

48

16

ITEM	QTY -041	PART NUMBER	DESCRIPTION
1	X	D4436-041	AFT BRACKET ASSEMBLY
2	1	D4435-043	BRACKET ASSEMBLY
3	1	D4436-043	AFT OUTBOARD BRACKET ASSEMBLY
4	1	D4436-045	AFT INBOARD BRACKET ASSEMBLY
5	1	D4440-1	GROMMET
6	4	AN525-832R6	SCREW



D4436-041 AFT BRACKET ASSEMBLY

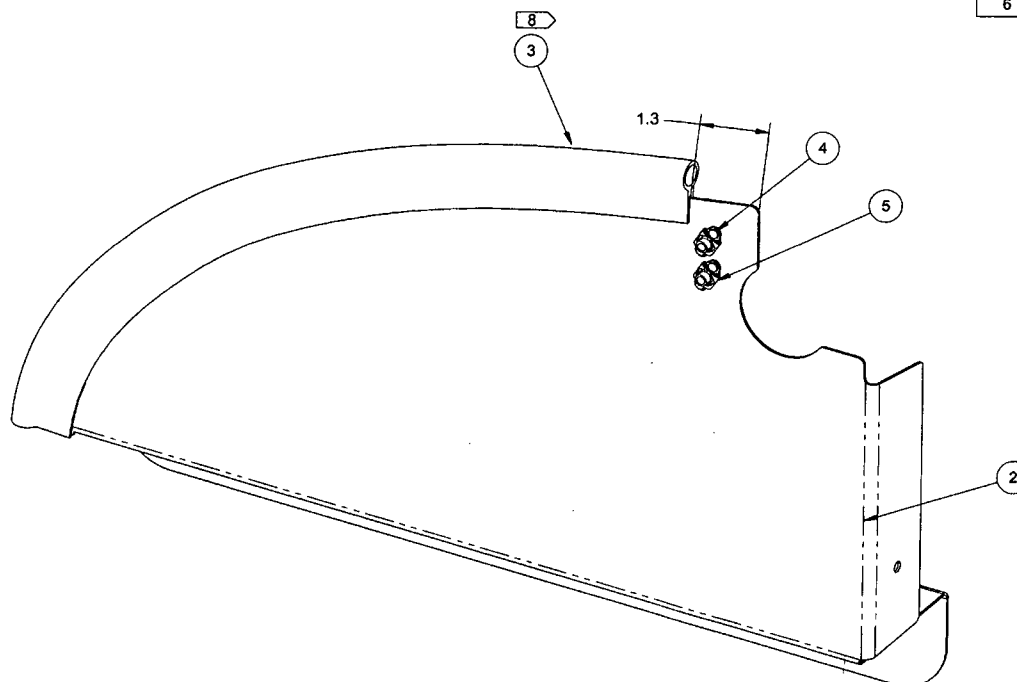
- NOTES:**
- 1) MATERIAL: N/A
 - 2) FINISH: N/A
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
 - 7) WEIGHT: 1.31 lbs
 - 8) TORQUE SCREW TO 12-15 (in-lb)

A	NEW ISSUE	RF	12.01.17
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF	DRAWING NO.	REV. A
CHECKED	RF	D4436	SHEET 1 OF 7
MFG. APPR.	RF	TITLE	SCALE
APPROVED	RF	COVER ASSEMBLY	NTS
DE APPR.	RF	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DATE	12.01.17		

20160121 SH 140879

RELEASED
12 2012-01-23

ITEM	QTY -043	PART NUMBER	DESCRIPTION
1	X	D4436-043	AFT OUTBOARD BRACKET ASSEMBLY
2	1	D4436-1	BRACKET
3	1	D4441-1-160	RUBBER SEAL
4	4	MS20426AD3-2	RIVET
5	2	MS21075L08	NUT PLATE
6	A/R	3M 1300/1300L	ADHESIVE



D4436-043 AFT OUTBOARD BRACKET ASSEMBLY

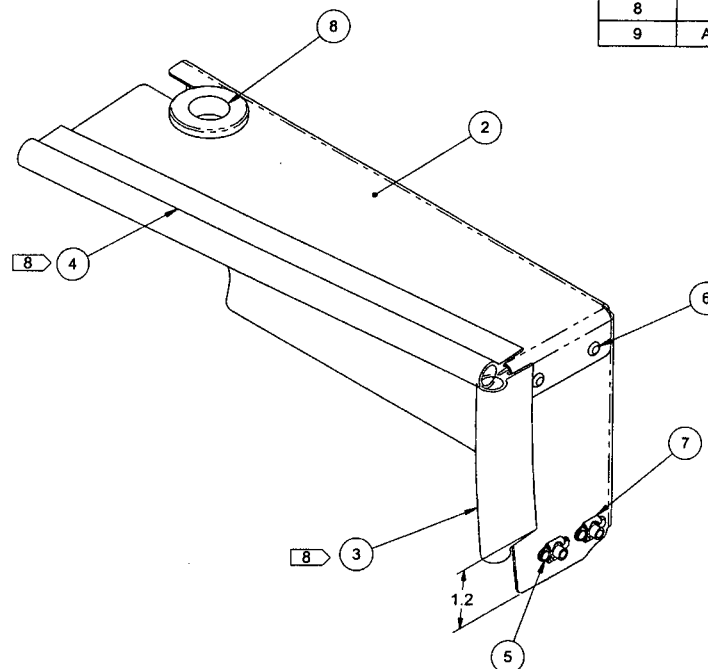
NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT "BLACK SANDEXT" (4.3.5.7) PER DART QSI 005 4.3
MASK NUT PLATE HOLES
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.78 lbs
- 8) INSTALL RUBBER SEAL TO EDGE OF PART AFTER POWDER COAT USING 3M 1300/1300L ADHESIVE
ENSURE BRACKET IS COMPLETELY INSERTED INTO GROOVE OF RUBBER SEAL.
IT IS ACCEPTABLE TO NOTCH THE SEAL AS REQUIRED TO PREVENT IT FROM BUCKLING

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
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MFG. APPR.	<i>[Signature]</i>	SHEET 2 OF 7	
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DATE	12.01.17	NTS	

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ITEM	QTY -045	PART NUMBER	DESCRIPTION
1	X	D4436-045	AFT INBOARD BRACKET ASSEMBLY
2	1	D4436-3	BRACKET
3	1	D4441-1-038	RUBBER SEAL
4	1	D4441-1-100	RUBBER SEAL
5	4	MS20426AD3-2	RIVET
6	2	MS20470AD4-3	RIVET
7	2	MS21075L08	NUT PLATE
8	1	MS35489-19	GROMMET
9	A/R	3M 1300/1300L	ADHESIVE



D4436-045 AFT INBOARD BRACKET ASSEMBLY

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT "BLACK SANDEX" (4.3.5.7) PER DART QSI 005 4.3
MASK NUT PLATE HOLES
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.42 lbs
- 8) INSTALL RUBBER SEAL TO EDGE OF PART AFTER POWDER COAT USING 3M 1300/1300L ADHESIVE,
ENSURE BRACKET IS COMPLETELY INSERTED INTO GROOVE OF RUBBER SEAL.
IT IS ACCEPTABLE TO NOTCH THE SEAL AS REQUIRED TO PREVENT IT FROM BUCKLING

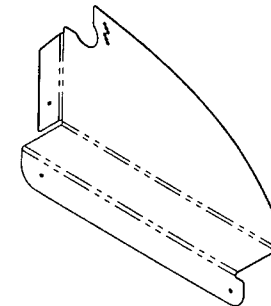
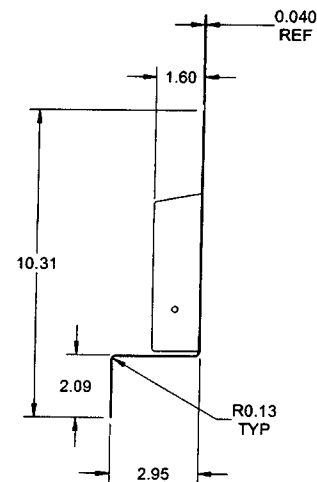
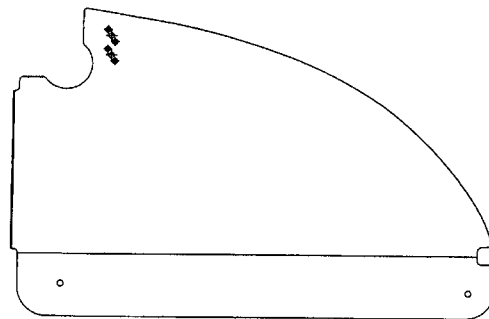
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DRAWN	RF		
CHECKED	<i>[Signature]</i>	DRAWING NO. D4436	REV. A
MFG. APPR.	<i>[Signature]</i>		SHEET 3 OF 7
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DATE	12.01.17		

RELEASED
2012-01-23
[Signature]

8 7 6 5 4 3 2 1

D
C
B
A

D
C
B
A



D4436-1 BRACKET

RELEASE
2012-01-23

NOTES:

- 1) MATERIAL: MAKE FROM D4436-1F FLAT PATTERN
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.69 lbs

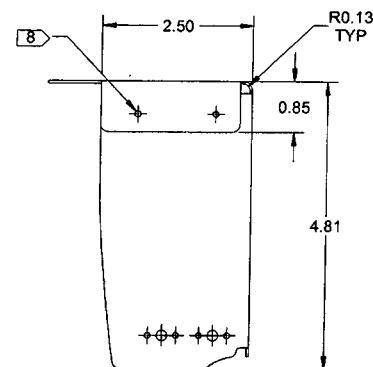
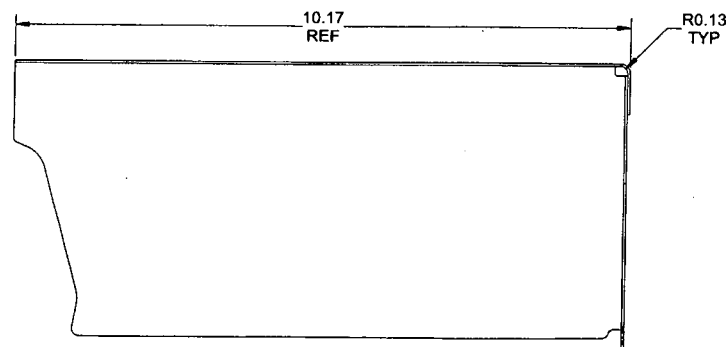
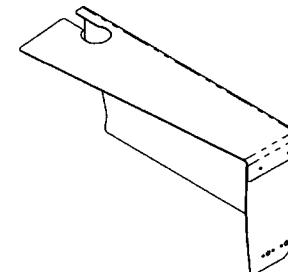
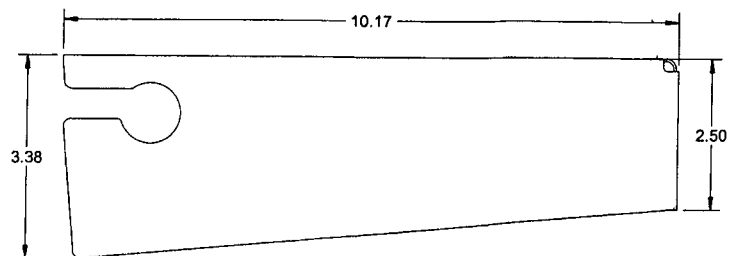
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DRAWN	RF		
CHECKED	RF	DRAWING NO. D4436	REV. A
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8 7 6 5 4 3 2 1



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2012-01-23

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D4436-3 BRACKET

NOTES:

- 1) MATERIAL: MAKE FROM D4436-3F FLAT PATTERN
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.33 lbs
- 8) TRANSFER $\varnothing 0.129$ HOLES THRU 2 PLACES

RELEASE
10 2012-05-23

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
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